IN THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF PUERTO RICO

In re: THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, as representative of THE COMMONWEALTH OF PUERTO RICO, *et al.* Debtors.[1]	PROMESA Title III Case No. 17 BK 3283-LTS (Jointly Administered)
In re: THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO as representative of PUERTO RICO ELECTRIC POWER AUTHORITY, Debtor.	PROMESA Title III Case No. 17 BK 4780-LTS

REBUTTAL EXPERT DECLARATION OF MR. THOMAS SANZILLO IN SUPPORT OF THE UNIÓN DE TRABAJADORES DE LA INDUSTRIA ELÉCTRICA Y RIEGO, INC.'S OBJECTION TO THE CONFIRMATION OF THE PUERTO RICO ELECTRIC POWER AUTHORITY'S PLAN OF ADJUSTMENT

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[1] The Debtors in these Title III Cases, along with each Debtor's respective Title III case number and the last four (4) digits of each Debtor's federal tax identification number, as applicable, are the (i) Commonwealth of Puerto Rico (Bankruptcy Case No. 17 BK 3283-LTS) (Last Four Digits of Federal Tax ID: 3481); (ii) Puerto Rico Sales Tax Financing Corporation ("COFINA") (Bankruptcy Case No. 17 BK 3284-LTS) (Last Four Digits of Federal Tax ID: 8474); (iii) Puerto Rico Highways and Transportation Authority ("HTA") (Bankruptcy Case No. 17 BK 3567-LTS) (Last Four Digits of Federal Tax ID: 3808); (iv) Employees Retirement System of the Government of the Commonwealth of Puerto Rico ("ERS") (Bankruptcy Case No. 17 BK 3566-LTS) (Last Four Digits of Federal Tax ID: 9686); and (v) Puerto Rico Electric Power Authority ("PREPA") (Bankruptcy Case No. 17 BK 4780-LTS) (Last Four Digits of Federal Tax ID: 3747). (Title III case numbers are listed as Bankruptcy Case numbers due to software limitations.)

I. Introductory Questions

Q. State your name.

Tom Sanzillo.

Q. State on whose behalf you are testifying before the Title III Court.

I am testifying on behalf of UTIER.

Q. What additional information did you review in preparation of your rebuttal testimony?

In addition to the materials reviewed in preparation for my direct testimony, I reviewed:

- Expert Testimony of Glenn George.
- Expert Testimony of Susan Tierney.
- Expert Testimony of Sebastian Edwards.
- Expert Testimony of Gary Strumayer.
- Expert Testimony of Maureen Chakraborty.
- Revenue Envelope and Legacy Charge Model.
- May 4, 2023 Deposition of William Zarakas.
- Cruces and Trebesch (2013) study cited in the Expert Testimony of Sebastian Edwards.
- March 2019 contract between New Fortress Energy and PREPA for the conversion of the San Juan power plant to natural gas and the delivery of natural gas to those units.
- Puerto Rico Energy Bureau Case NEPR-MI-2019-0016 regarding the interconnection of distributed generation to the grid.

Q. What is the purpose of your rebuttal testimony?

My rebuttal testimony addresses the following points:

- Both the Oversight Board and Bondholders' expert witnesses failed to accurately address the Oversight Board's underestimate of future fuel costs, which has a multi-billion dollar impact on the Revenue Envelope Model that both parties rely on.
- The Oversight Board's expert witness does not adequately support how the Revenue Envelope Model generates a Legacy Charge that comports with the Oversight Board's stated goals of not "(1) threatening the sustainability of PREPA as a functioning utility; (2) threatening the sustainability of the Puerto Rico economy; and/or (3) subjecting customers to undue hardship."
- The Bondholders' proposal regarding additional revenues that could be extracted from the system during the Plan of Adjustment period is not credible.
- The bonds are likely unratable, and a significantly greater haircut would be needed to ensure sustainable market access for the electrical system's unmet capital needs.
- In addition, I correct a mathematical error in my direct testimony.

II. Rebuttal of Oversight Board Expert Witness Dr. Glenn George

Q. In his Expert Testimony, Dr. George finds the fuel forecast underlying the Plan of Adjustment to be reasonable. Do you agree?

No, I do not.

Dr. George correctly notes in his testimony that PREPA has historically underestimated its future fuel costs. Fuel for PREPA's grid is comprised of fuel oil, diesel oil, natural gas (LNG) and coal. Natural gas constitutes the largest component of the fuel mix. Over the last five years, fuel costs have ranged in actual cash amounts from $1,200 million to $2,090 million constituting 40% to

65% of annual expenses.[2] These wide variations occur due to historic volatility in oil and natural gas prices.

Dr. George incorrectly concludes that the fuel forecast in the 2022 PREPA Certified Fiscal Plan, which underlies the Plan of Adjustment, is conservative and reasonable. The forecast is neither, for reasons which I explain below.

Q. What is the basis for Dr. George's determination?

Dr. George finds that, when comparing the fuel price forecast in the 2022 PREPA Certified Fiscal Plan (which underlies the Plan of Adjustment) to a benchmark Energy Information Administration forecast, that the Fiscal Plan's estimates of the future fuel oil and diesel costs components of the fuel mix were lower than the EIA forecast.[3] If accurate this assumption would underestimate expenses for these fuel sources and lead to an underestimation of the revenues needed to run the system. Projected rates would be too low.

George finds that this otherwise troublesome projection is offset by the Fiscal Plan's natural gas and coal forecasts, which he determines to be higher than the EIA forecast. Specifically, he finds that the Fiscal Plan's natural gas forecast is 105% to 243% higher than the EIA forecast over the period he considered.[4] Given that natural gas is the largest fuel source in Puerto Rico, if true the overestimated natural gas forecast would compensate for the fuel and diesel oil deficits.

George emphasizes the importance of being conservative (i.e. on the high side) when estimating future fuel costs and goes on to characterize the Fiscal Plan fuel forecast as reasonable.[5]

Q. Why do you arrive at a different conclusion?

[2] June 2018, June 2019, June 2020, June 2021, and June 2022 PREPA Monthly Reports to the Governing Board.
[3] George Declaration, p. 35.
[4] George Declaration, Appendix C.
[5] George Declaration, p. 35.

Dr. George's conclusion that the Fiscal Plan's natural gas forecast is higher than the EIA forecast is based on an apples-to-oranges comparison. Dr. George incorrectly compares the EIA's forecast of natural gas prices at the Henry Hub in Louisiana with the Fiscal Plan's natural gas forecast. The EIA estimate is based on a point-of-sale price at the Henry Hub. The estimate in the Fiscal Plan is based on the delivered natural gas price to the grid in Puerto Rico. The Fiscal Plan forecast delivered price includes the Henry Hub spot price plus "current effective PREPA contract adders."[6] For the current contract for liquefied natural gas (LNG) delivered to San Juan, the contract price is: [7]

Delivered Price = 1.15 * (Henry Hub price) + $6.50/MMBTU

This is a fatal flaw in Dr. George's methodology as he seeks to construct an accurate assessment of PREPA's natural gas budget.

In order to make an apples-to-apples price comparison, where PREPA's estimated fuel price comports with an independent third-party source like the EIA, the EIA Henry Hub forecast needs to be converted into a delivered price in Puerto Rico using this formula. Correcting for this error actually means that PREPA understated its natural gas price forecast in every year except 2023 relative to the EIA.

Q. What is the implication of this incorrect calculation?

Given the size of PREPA's natural gas bill over the forecast period (ranging from $106 million to over $500 million a year)[8], Dr. George's failure to include the natural gas contract price adders in his analysis of the EIA prices is significant. His conclusion that the Fiscal Plan's fuel forecast is

[6] 2022 PREPA Certified Fiscal Plan, p. 156.

[7] Fuel Sale and Purchase Agreement between NFEnergia and Puerto Rico Electric Power Authority, March 2019, Exhibit C.

[8] I adjust the annual fuel cost projection in the Revenue Envelope Model to assume that 18% of the fuel bill is for natural gas, based on the current fiscal year to-date fuel expenditures (March 2023 PREPA Monthly Report).

reasonable is based on not including the adder to EIA prices. The difference between including this adder versus not, given the amount of natural gas that PREPA consumes, amounts to an error of about $1 billion (net present value) in his analysis over the period he considered.

Q. If the EIA natural gas price forecast is corrected to include the Puerto Rico contract price adders, what does this tell us about the Fiscal Plan's fuel price forecast?

Once corrected, Dr. George's testimony supports the conclusion of my direct testimony that the Fiscal Plan underestimates PREPA's future fuel costs. Using the numbers in Dr. George's Appendix C and adjusting the LNG forecast to include the contract adder as described above, from FY 2024 to FY 2035, the Fiscal Plan's commodity price forecasts are lower than the benchmark EIA forecast by 25-40% for fuel oil; 6-27% for diesel; and 7-16% for natural gas.

Applying the annual adjustments to the Fiscal Plan's annual fuel cost forecast for FY 2024 to FY 2035, I find that the PREPA Fiscal Plan underestimated fuel costs by 26% over this period, relative to using the adjusted EIA 2022 forecast. This is a total of $2.9 billion in fuel costs not accounted for in the Plan of Adjustment ($2.1 billion net present value). This is consistent with PREPA's historic pattern of underestimating its fuel forecasts, as noted by Dr. George.

This likely underestimation of future commodity prices adds to the other dysfunctional financial conditions identified in my direct testimony including the planned construction of a new natural gas plant and the failure to meet the Fiscal Plan's renewable energy targets. These are factors that increase PREPA's dependence on fossil fuels and crowd out the change to less expensive renewable energy.

Q. In addition to mischaracterizing PREPA's fuel forecast, are there other aspects of Dr. George's testimony that you find unreasonable?

Yes. In addition to the fuel price issue, I find that Dr. George's testimony does not support the notion that the Legacy Charge is affordable to non-residential customers. Dr. George's testimony explains that the "revenue envelope" was calculated based on how much the median residential customer could afford to pay in additional rates in FY 2024 before exceeding the 6% "share of wallet" threshold.

After this exercise was conducted, the Oversight Board determined to reduce the fixed charge on residential customers. In order to meet the revenue needed to cover debt service the Oversight Board increased the charges on non-residential customers. Dr. George states, "These adjustments seem appropriate to me to ensure the Legacy Charge is not unduly burdensome on those customers who can least afford it."[9]

Dr. George offers no evidence that in fact the non-residential customers can afford the increased burden. One of the goals of the Revenue Envelope Model evaluated by Dr. George's testimony, according to Exhibit P of the Disclosure Statement ("Legacy Charge Derivation"), is to arrive at a rate that "cannot exceed the conceptual upper bound of affordability, including … threatening the sustainability of the Puerto Rico economy; and/or… subjecting customers to undue hardship." [10]

The Revenue Envelope Model in itself only considers affordability for the residential class. On May 2nd, 2023, Mr. William Zarakas confirmed in his deposition that the team that developed the Revenue Envelope Model did not consider the impact of the Legacy Charge on Puerto Rico's Gross Domestic Product (GDP), private sector employment or business closures. This is particularly inexplicable given the Commonwealth Fiscal Plan's projections of an unsustainable outlook for Puerto Rico's economy, with a prolonged decline in real GDP forecasted from FY 2029 through

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[9] George Declaration, p. 28.
[10] Exhibit P of the Disclosure Statement, p. 4.

the end of the forecast period.[11,12] Dr. George similarly ignores the impact of rate increases on commercial and industrial customers, giving no basis for his assertion that it was reasonable for the Oversight Board to transfer a seemingly arbitrarily-determined cost from residential to non-residential customers.

Q. In addition to considering the sustainability of the economy and affordability to customers, Exhibit P also states that the revenue envelope calculation aimed to arrive at a rate that "does not threaten the sustainability of PREPA as a functioning utility."[13] How does Dr. George's testimony address this issue?

Dr. George fails to show that the Revenue Envelope Model comports with this other affordability goal outlined in Exhibit P. Dr. George in fact acknowledges that there are unmet capital needs not included in the Revenue Envelope Model. And he also makes the point to that the electrical system is fragile and in need of substantial investment.[14]

The reality is that PREPA's electrical system is currently not financially sustainable. The evidence provided by the experts generally shows the system to be costly and unreliable; customers are defecting from it at record pace, as I will detail below. Mr. Zarakas explained in his deposition that the team that created the Revenue Envelope Model did not evaluate whether the capital and operating budgets would be sufficient to meet grid reliability goals. A system that provides life threateningly poor service needs to be transformed, or at least firmly established on a path to transformation, before one could even begin to argue that extracting more than $13 billion over the next 35 years for Legacy debt payments (the actual, undiscounted cash needed to cover $5.68

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[11] 2023 Commonwealth Certified Fiscal Plan, Volume II, p. 5.
[12] I find Dr. Chakraborty's argument that non-residential customers can afford to pay more uncompelling for the same reason.
[13] Exhibit P of the Disclosure Statement, p. 4.
[14] George Declaration, p. 4-7.

billion),[15] as the Oversight Board proposes, would not further undermine "the sustainability of PREPA as a functioning utility."

II. Rebuttal of Bondholders' Expert Witnesses Dr. Maureen Chakraborty and Dr. Susan Tierney

Q. What is your overall opinion of the Bondholders' Expert Witnesses' testimonies?

I find that their testimonies, as a whole, are divorced from the history and ongoing reality of Puerto Rico's electrical system. Dr. Chakraborty pulls together the findings of several of the bondholder witnesses, aggregating various "corrections" that the witnesses made to the Oversight Board's Revenue Envelope Model in order to argue that there are billions of dollars of additional future revenue available for bondholders.[16]

Two examples demonstrate the flaws in the Bondholders' Expert Witnesses' analysis.

Q. Please describe the first example of the flaws in the bondholders' analysis.

One of the "corrections" that Dr. Chakraborty makes is to the part of the Revenue Envelope Model that calculates how much the Hypothetical Residential Customer can afford to pay in Fiscal Year 2024 without exceeding the 6% "share of wallet" threshold.

Dr. Chakraborty argues that the Hypothetical Residential Customer uses less electricity per month than the Board assumed. This implies that their electric bill (consumption multiplied by the per kWh rate) in FY 2024 will be lower than the Board assumed and there is therefore more revenue that could be obtained without exceeding the "share of wallet" threshold. Extrapolating this to the entire system Dr. Chakraborty identified another $1.5 to $3.3 billion in annual revenue that can be used for debt service.[17]

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[15] Exhibit D to Disclosure Statement ("LOAD FORECAST AND ILLUSTRATIVE CASH FLOW FOR NEW BONDS").
[16] Chakraborty Declaration, p. 14.
[17] Chakraborty Declaration, p. 29-34.

Implicit in this calculation is Dr. Chakraborty's assumption that the 2024 Rate accurately portrays PREPA's expenses. It does not. In fact, as discussed in my direct testimony, the FY 2024 rate likely substantially underestimates PREPA's fuel costs. Using the estimate derived in my direct testimony of a $2 billion fuel bill (instead of $1.375 billion) translates into a Projected FY 2024 Rate that is 3.9 cents/kWh higher. When this is taken into account, that is when the fuel estimate is more accurately assessed, the amount that is theoretically available to support the Legacy Charge is substantially reduced, irrespective of whether Dr. Chakraborty or the Oversight Board's monthly consumption estimate is more accurate.

And it is not just in FY 2024 that the fuel budget is likely underestimated. The Bondholders' Expert Witnesses fail to properly account for the multibillion, multi-year fuel budget impacts that could substantially offset their proposed "corrections." The failure by either the Oversight Board or the Bondholders, both of whom rely on this Revenue Envelope Model as the basis for their Expert Witnesses' testimonies, to evaluate a sensitivity to fuel prices –especially given PREPA's longstanding history of underestimating fuel forecasts and failing to shift away from fossil fuels– is unreasonable.

In general, Dr. Chakraborty and the Bondholders' Expert Witnesses do not consider any factors that could push operational expenses higher and dismiss without consideration the various studies that show that the federal investment is not sufficient for the grid (see my direct testimony for more detail on both points).

Q. What is the second example?

The second example has to do with Dr. Chakraborty and Dr. Tierney's conclusion that more money is available because future electricity sales will be higher than forecasted, as argued by Dr. Tierney's testimony. Dr. Tierney argues that because (1) GDP growth will be higher than forecast,

(2) PREPA will fail to achieve its energy efficiency goals, (3) growth in distributed generation will be lower, and (4) electric vehicle usage will grow faster than forecast, that therefore PREPA will be selling more electricity in future years.[18] Dr. Tierney assumes that more electricity sold equals more revenue available for debt service. That is only true if each kWh sold actually produces a surplus. As a budgeting matter,[19] each new kwh sold under the existing regime actually produces larger, not smaller deficits, if the utility can't cover the fuel bill.

In addition, the actual conditions are far more nuanced than Dr. Tierney's model. She is correct that PREPA is likely to fail to meet its energy efficiency goals. This maintains a high dependence on high cost fossil fuels– weakening the case for an available surplus.

However, I disagree that the uptake of Electric Vehicles is likely to be as aggressive as she outlines and also disagree with her perspective that distributed generation will be lower than the Oversight Board's forecast.

Q. What is Dr. Tierney's view of future electric vehicle sales, and why do you believe that electric vehicle sales are likely to be lower than she estimates?

Dr. Tierney finds the Oversight Board's Alternative Forecast to present a "more reasonable" projection of EV penetration.[20] I believe the Alternative Forecast likely overstates electric vehicle uptake. The Alternative Forecast "incorporates consumer sentiment and evaluates energy grid readiness through PREPA's SAIDI and SAIFI [grid reliability index] scores."[21] The statement implies that the electric vehicle forecasts assumes the grid reliability improvements projected in the Fiscal Plan.

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[18] Tierney Declaration, p. 14-39.

[19] As a practical matter, in the past, PREPA has dealt with this reality by converting financial deficits into operational deficits– that is, by cutting other aspects of the budget, such as maintenance. In the future, this pattern is likely to continue, with the possibility as well that PREPA could divert cash from the Legacy Charge to cover the deficit, which would constitute an event of Default under the Plan of Adjustment.

[20] Tierney Declaration, p. 38-39.

[21] 2022 PREPA Certified Fiscal Plan, p. 154-155.

The Alternative Forecast is undermined by the facts that: (1) Puerto Rico has failed to achieve previous SAIDI and SAIFI goals set by the Board;[22] (2) LUMA is not spending sufficiently to meet current reliability goals in the Fiscal Plan;[23] and (3) the team that created the Revenue Envelope Model did not evaluate whether the capital and operating budgets would be sufficient to meet grid reliability goals.[24] Dr. Tierney also does not explain how an organization that cannot meet either its efficiency or renewable energy goals will somehow manage to improve its reliability performance. Given that the Alternative Forecast appears to be based on meeting grid reliability targets, I find its projection of electric vehicle penetration to be overstated. Why would households that are installing solar and storage systems at a record pace (see below) trust the grid for their transportation needs? Further, it is unclear how or whether the Alternative Forecast takes into account the need for additional investment in charging infrastructure.[25]

Q. What is Dr. Tierney's view of the growth of distributed generation (rooftop solar) in Puerto Rico, and why do you disagree?

Dr. Tierney's assertion that the Oversight Board's load forecast assumes "unprecedented"[26] increases in rooftop solar is contradicted by the current reality of the solar market in Puerto Rico. The most recent data shows that Puerto Rico just experienced 54% year-over-year growth in distributed generation.[27] This is, in fact, far higher than the forecast assumed by the Board, which starts with annual growth of about 16% and tapers off to about 1.6% by FY 2051.[28] While the

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[22] The August 2018 Fiscal Plan set a 5-year goal of achieving "reliability performance in line with mainland US utility median performance," as measured by SAIDI and SAIFI indices (August 2018 PREPA Certified Fiscal Plan, p. 42).
[23] See my direct testimony at p. 19-20.
[24] Deposition of Mr. William Zarakas held on May 4, 2023.
[25] https://www.theweeklyjournal.com/business/slow-progress-in-electric-car-sales-in-puerto-rico/article_b029898a-c83a-11ea-84ce-a7295efed566.html; https://www.elnuevodia.com/english/news/story/transition-to-electric-cars-in-puerto-rico-is-full-of-obstacles/.
[26] Tierney Declaration, p. 26.
[27] LUMA filing in Puerto Rico Energy Bureau Case NEPR-MI-2019-0016, April 23, 2023, shows that grid-connected distributed generation capacity increased 54% from April 2022 to March 2023.
[28] Revenue Envelope Model, p. 178-182.

current growth rate of 54% per year is obviously not sustainable through 2051 (the market will be saturated before that), the Oversight Board's near-term forecast clearly underestimates the growth of distributed generation.

Q. What is your conclusion regarding the Bondholders' Expert Witnesses' load forecast?

When these factors are considered, it is clear that any adjustment that might be needed to the load forecast in the Revenue Envelope Model is unlikely to translate into the incremental revenue increases that either Dr. Chakraborty or Dr. Tierney wish for.

Q. Beyond these specific critiques, what is your assessment of the Bondholders' Expert Witnesses'overall assertion about the level of revenue available for debt service?

It is worth taking a step back from the Revenue Envelope spreadsheet model to understand the context of what the Bondholders are proposing. Figure 1 of Dr. Chakraborty's testimony shows that the Bondholders believe that PREPA can afford $13.4 billion in New Bonds, instead of $5.68 billion in New Bonds, or 2.35 times greater.

What would be the rate implications of such a proposal? We estimate that the resulting Bondholders' Legacy Charge for non-exempt customers starts at 8 cents/kWh and grows to 12 cents/kWh by FY 2051.[29] In reality, the charge would need to be even higher to compensate for the loss of load (through grid defection, migration, and business closures) that such a charge would provoke. Adding this to the Fiscal Plan's projected electric rates would immediately put rates for non-exempt customers above 30 cents/kWh and above 40 cents/kWh by 2035 (or sooner given the

[29] I estimate that 45% of Puerto Rico's residential customers will be exempted, based on the current percentage of the population enrolled in Medicaid. Assuming that these customers consume slightly less than average (350 kWh per month rather than 420 kWh per month), they account for 16% of total sales. I then divide the annual revenues projected from the Legacy Charge in Appendix D to the Disclosure Statement by the forecast sales to non-exempt customers. This average rate is then multiplied by 2.35 to scale it to the Bondholders' proposal.

Fiscal Plan's underestimation of fuel costs). This is 50% to 100% above previous thresholds set for affordability. I find this result to not be credible.

If this were scaled to another state, it would be equivalent to arguing that middle class residents and small business owners in, for example, New York, could afford to pay above 103 cents/kWh for a system that cannot reliability keep the lights on.[30]

III. Rebuttal of Bondholders' Expert Witnesses Mr. Sebastian Edwards and Mr. Gary Strumayer

Q. What is your assessment of Mr. Strumayer's analysis regarding the terms and conditions for the New Bonds, as set forth in the proposed Plan of Adjustment?

I concur with Mr. Strumayer that the bond terms and conditions in the Plan of Adjustment contain unusual provisions that are likely to result in the bonds trading below par. However, I do not find this to be an argument for strengthening the rights of creditors, as implied by Mr. Strumayer's testimony.

Q. Why do you arrive at a different conclusion?

The reason that the bond structure in the Plan of Adjustment departs so fundamentally from standard bond agreements is based on how the Oversight Board and its advisors weighed the various economic and financial factors facing PREPA. These experts are trying to balance a low or no growth economy, a declining population with limited incomes, a hurricane prone environment, a grid in severe disrepair, high and volatile electric rates, a weak political structure, hostility toward regulation, unstable management and oversight, a contentious budget climate and

[30] The median household income in New York state is $75,157, versus $21,967 in Puerto Rico. (US Census Bureau).

union and retiree opposition with standards regarding default, repayment, affordability, and recovery rates.[31]

The result of trying to weigh all the factors and construct a bond deal that meets basic standards have failed. My conclusion is that *any* debt deal that involves repayment of Legacy Debt through rate increases will likely be unratable. The objective factors outlined during this proceeding outweigh even the herculean effort reflected in the Plan of Adjustment to construct a responsible bond offering.

Q. What is your assessment of Mr. Edwards' argument that imposing too large of a haircut on Bondholders will raise PREPA's future borrowing costs?

Mr. Edwards arguments are largely theoretical, whereas the set of credit factors facing PREPA are specific and do not fit well into existing academic modeling.

Mr. Edwards tell us that the size of the haircut has a direct impact on the duration of restricted or prohibited market access.[32] This will not apply in PREPA's case. The principal study (Cruces and Trebesch, 2013) relied upon by Edwards examines sovereign debt. Puerto Rico is not a sovereign. It can and does rely upon the United States Treasury for financial support for a substantial amount, but not all, of its capital needs to rebuild the system.

PREPA's post-bankruptcy investment outlook will be assisted substantially if LUMA can convert the $14 billion in federal money and any additional federal funds into a strong working asset. While annual budgets will still see upward pressure on rates as operational and capital needs are

[31] In a prior declaration to the Court in support of the 2019 RSA, Oversight Board witness David Brownstein cited the Oversight Board's objectives as follows: "any recovery by PREPA's creditors had to be secondary to the Commonwealth's overall economic recovery"; "protect the Commonwealth and PREPA ratepayers by stabilizing rates and providing as much transparency and certainty as possible in future expected energy costs"; "fostering a healthy economic outlook for the future of the utility"; "reducing PRPEA's debt obligations"; and "not … agree to a restructuring that would negatively impact Transformation of PREPA." (Brownstein Declaration, p. 10-11, Case No. 17-BK-03283-LTS, Doc # 7816, July 2, 2019).

[32] Edwards Declaration, p. 69-70.

more rationally considered, a more modern, reliable system should improve investment opportunities. The improved investment opportunity is not limitless but constricted by the same economic factors discussed throughout this testimony.

So, if the Legacy Charge and Plan of Adjustment are rejected in favor of a plan which settles the debt with no rate impact then going forward the substantial federal support should be credit positive at least to support future, more modest debt issuances.

Q. What other factors are distinct about Puerto Rico's bankruptcy and access to capital markets?

Another unique aspect of PREPA has been its ability to effectively borrow during the bankruptcy period. PREPA issued a contract to New Fortress Energy in 2019 for the upgrading of the San Juan Power Plant to convert it from diesel fuel to a dual use diesel and natural gas. The plan included a multi-year gas supply arrangement with New Fortress. The contract provided for the payment of the natural gas volumes delivered by New Fortress as well as monthly payments of $833,333.34 to repay New Fortress's upgrades of the units.[33] PREPA effectively borrowed during bankruptcy by agreeing to repay the San Juan construction costs as part of its natural gas supply contract.[34]

Q. What, in your view, would be the consequences for PREPA's future market access of NOT imposing a much more substantial haircut on the Legacy Debt?

As stated in my direct testimony, PREPA will need to issue additional debt ("Additional Bonds") to cover the unmet capital needs of the system going forward, including an unfunded amount needed to complete the grid reconstruction. Under the proposed Plan of Adjustment, such

[33] Fuel Sale and Purchase Agreement between NFEnergia and Puerto Rico Electric Power Authority, March 2019, Section 12.1.

[34] Cruces and Trebesch discuss the concept of partial market access. Although they do not clearly define it, they use one standard to offer as example. The authors state that a transaction that provides a "net transfer from a private foreign creditor" might constitute partial market access (p. 21). Whether this example would meet the authors' definition is uncertain.

Additional Bonds will be subordinate to the repayment of Legacy Debt. PREPA's ability to issue Additional Bonds will also likely be impacted if Puerto Rico is unable to pay debt service on the Legacy Debt and continues carrying unpaid debt service on its books, per the unusual default provisions described by Mr. Strumayer and in my direct testimony.

Considering these nuances, unless a settlement is arrived at with no rate impact, PREPA will be saddled with a debt deal that is unaffordable and therefore unsustainable. The financial dysfunction that this will perpetuate – lack of funds for operational needs, customers defecting from the system, and unpaid debt service remaining on the books of the utility, among other problems – will itself impede market access. What is actually needed is to give Puerto Rico the fresh start required to become a going concern.

IV. Conclusions

Q. Is there anything that you need to correct from your direct testimony?

Yes. At p. 8 of my direct testimony, I incorrectly added $5.68 billion (a discounted cost of future debt payments) to $2.425 billion (the Board's undiscounted estimate of future capital expenditures needs). I should have used a discounted estimate of future capital expenditures, which would be less than $2.425 billion. This does not change either of the conclusions of this part of my testimony: (1) the amount of debt proposed by the Plan of Adjustment (both for Legacy Debt and Additional Bonds) is still outside the range of the Debt Sustainability Analysis of the Fiscal Plan; and (2) the Plan of Adjustment significantly underestimated the unmet capital expenditure needs of the system, which other analysis have put at approximately $6 billion (undiscounted).

Q. What is the conclusion of your rebuttal testimony?

It might be possible to extract more money from a spreadsheet model, but not from Puerto Rico's actually existing electrical system and economy– with its high and volatile fuel costs, ongoing

failure to meet reliability and affordability targets, low income customer base, weak economic outlook, vulnerability to hurricanes and weak regulatory structure.

Essentially it is difficult to measure any fundamental improvement made by PREPA since PROMESA was enacted and the Oversight Board appointed. PREPA does not have a credibly balanced budget where recurring revenues cover recurring expenses. There is no transparent system to measure progress on revenue and expenditure initiatives. In 2018, the Oversight Board set 5-year goals that included achieving rates below 20 cents/kWh (driven by a substantial reduction in fuel and purchased power costs) and grid reliability metrics consistent with the U.S. average. Today rates are above 26 cents/kWh and grid reliability metrics are comparable to or worse than they were pre-hurricane Maria.[35]

The Oversight Board and Bondholders' failure to grapple with this reality undermines their analysis. Specifically, they fail to appreciate the impact of the ongoing excessive dependence on fossil fuels on the electrical system budget. The need to substantially reduce fossil fuel dependency is, according to 2022 PREPA Certified Fiscal Plan, at the core of the financial challenge that PREPA faces. The historic difficulty of achieving a transformation to renewable energy and the political pressures operating against it mean that there will be no chance of generating the cash surpluses necessary to pay for legacy debt. A high priced, fossil fuel dependent electricity system will contribute to Puerto Rico's weak economic outlook. Starving the system of capital and operational spending means that basic reliability standards cannot be met, which is a red flag not only to residential customers but also to manufacturers. The Oversight Board and Bondholders fail to appreciate the rate at which the public is installing rooftop solar and storage in response to the deteriorating grid.

[35] See p. 14 of my direct testimony and p. 24 of the August 2018 PREPA Certified Fiscal Plan.

The Expert Witnesses for the Oversight Board and Bondholders have addressed some of the problems, but none grabbed hold of the problem clearly and concisely. PREPA, and LUMA and Genera as its operators will continue to find it difficult if not impossible to make ends meet on a day to day operational basis. The slow or no growth economy consigns PREPA and the Island to a difficult future. Here, past performance is an indicator of the future. The Plan of Adjustment and proposed Legacy Charge is unrealistic. A clear comprehensive plan is available.

Q. What are your recommendations?

IEEFA's plan provides a reasonable settlement for bondholders, employees, retirees, consumers, businesses. It also is one that does not place any further burden on currently unaffordable electricity rates.

As discussed in IEEFA's October 2019 letter[36] to the Puerto Rico legislature such a plan would: 1) reimburse those bondholders who hold insured bonds; 2) repay bondholders from a fund supported by a group of underwriters that benefited from PREPA's issuances but who nevertheless supplied inadequate diligence as outlined in the Oversight Board's Investigative report prepared by Kobre and Kim; 3) establish a final recovery rate that amounts to the sum of Items 1 and 2; 4) Use some amount of the fund to bring the pension fund into actuarial alignment and to insure that any small, resident of Puerto Rico bondholder be compensated 100% for their bonds; 5) Establish clear liability building upon Kobre and Kim's investigative research and make criminal and civil referrals as appropriate; 6) Appoint an independent private sector inspector general to insure that the IRP is implemented and that PREPA, LUMA or their predecessors are supported in creating an

[36] https://ieefa.org/wp-content/uploads/2019/10/Letter_to_the_Legislative_Assembly_Regarding_Restructuring_Agreement_for_PREPA_October_2019.pdf.

effective and ethical organization to complete the grid rebuild and run an operation that controls costs and rates.

As a financial proposition, IEEFA's plan utilizes the $14 billion as substantial core funding to rebuild the grid. The balance of the cash needed to complete the job can be raised through: 1) Additional federal dollars; 2) Additional Bond issuances, if possible; or 3) Innovative financing techniques like that described above in the New Fortress Energy contract for the San Juan plant.

The Plan of Adjustment will fail for all the reasons cited in my testimony and that of others. The plan IEEFA proposes gives PREPA and its predecessors a chance to start fresh.

I declare under penalty of perjury pursuant to the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Dated: May 15, 2023.

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Thomas Sanzillo